# North Idaho Air Quality Summary - February 2020

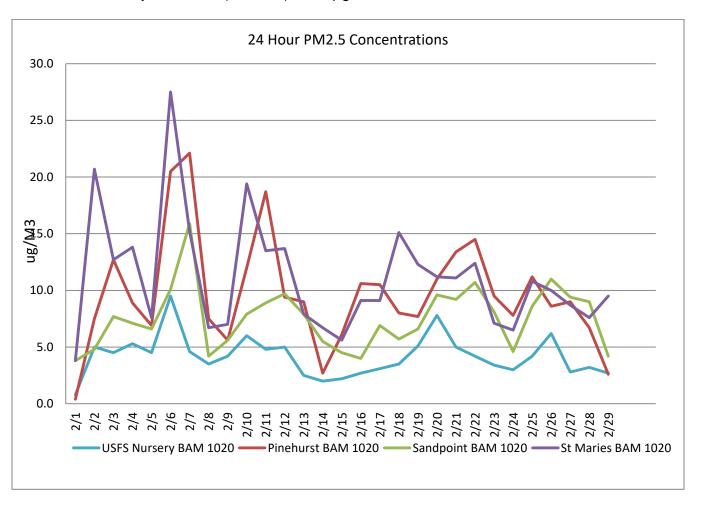
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This summary of North Idaho's air quality is compiled from the various air quality samplers located in the Department of Environmental Quality's Coeur d'Alene Region for the month of February 2020.

The Coeur d'Alene Regional Network encompasses the counties of Boundary, Bonner, Kootenai, Shoshone, and Benewah. The data presented in this report is considered preliminary data and has not been completely evaluated for all quality assurance requirements and is therefore subject to change.

#### PM2.5 CONTINUOUS DATA

The graph below displays the average daily 24-hour  $PM_{2.5}$  values for the month and is expressed in micrograms per cubic meter, ( $\mu g/m^3$ ). These values were calculated by averaging hourly values midnight to midnight from the agency's  $PM_{2.5}$  BAM samplers located in the Cities of Pinehurst, Sandpoint, and St. Maries and on Nursery Road in Kootenai County. The 24 hour PM2.5 National Ambient Air Quality Standard (NAAQS) is 35  $\mu g/m^3$ .



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The table below shows the maximum 24 hour values calculated from continuous BAM monitoring for this reporting period. The NAAQS for PM2.5 is 35  $\mu$ g/m³ for a 24 hour average. Depiction of preliminary continuous monitoring data in the table below is for informational purposes only and is considered preliminary data.

Monitoring Site	Highest Reading (µg/m3)	Date
	(µg/iiiə)	
USFS Nursery BAM 1020	9.5	February 6
Pinehurst BAM 1020	22.1	February 7
Sandpoint BAM 1020	15.9	February 7
St. Maries BAM 1020	27.5	February 6

## PM2.5 FEDERAL REFERENCE METHOD (FRM) DATA

At this time the Coeur d'Alene Regional Office of Idaho DEQ uses the Federal Reference Method Sampler (filter based) measurements for NAAQS compliance determination at the Pinehurst and St. Maries monitoring sites. This method requires that 75% of available data be collected per quarter. Other filter processing requirements are applicable to this method. The Coeur d'Alene Regional Office's collection efficiency rate for February is shown in the table below. The collection percentage could change based on quality assurance requirements yet to be completed.

## **February FRM filter recovery Efficiency**

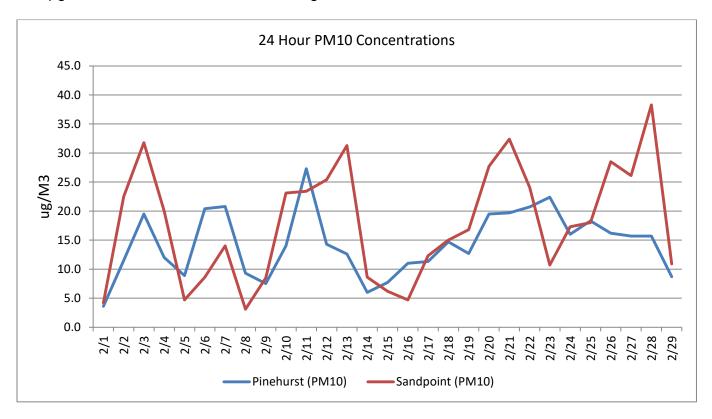
Site	Sample Days	Valid Samples	Collection Percentage
Pinehurst	29	29	100%
St. Maries	29	19	66%

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#### PM10 CONTINUOUS DATA

The graph below shows the 24 hour values for PM10. There were no apparent exceedances of the  $150 \mu g/m^3$  standard for the 24 hour average.



## **Air Quality Actions**

There were no Air Pollution Forecast and Cautions (Stage 1 Burn Ban) issued in north Idaho during the month of February.

A power outage on the 12<sup>th</sup> of January at the St. Maries site led to a failing filter pressure sensor which caused a flow and ambient pressure failure in the ESFRM (there were no alarms triggered for these failures). The ambient pressure error was fixed by cycling the power on 2/5, and the filter pressure sensor was replaced on 2/7. The filters from the pressure sensor failure (2/1- 2/5) are not being officially voided until after comparison with the precision and BAM. On 2/26, corrupt firmware resulted in a malfunction that kept the instrument from running on the 26<sup>th</sup>, 27<sup>th</sup>, 28<sup>th</sup>, and 29<sup>th</sup> of February. A replacement ESFRM was deployed on 3/1.

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### **NETWORK INFORMATION**

The table below summarizes all active and inactive air quality samplers located within the North Idaho area during the month of February 2020.

Site	Monitor	Туре	Comments	Current Status	Data Completeness
USFS Nursery	BAM 1020 PM2.5	Continuous		Active	99.8%
USFS Nursery	Meteorological Tower	Continuous		Active 100%	
St. Maries	BAM 1020 PM2.5	Continuous		Active	99.8%
St. Maries	Met One E-Seq-FRM PM2.5	Filter		Active	66%
St. Maries	Precision E-SQ-FRM	Filter		Active	100%
Pinehurst	Met One E-Seq-FRM PM2.5	Filter		Active	100%
Pinehurst	BAM 1020 PM2.5	Continuous		Active	99.7%
Pinehurst	BAM PM10	Continuous		Active	99.7%
Pinehurst	Meteorological Tower	Continuous		Active	100%
Sandpoint U of I Extension Office Sandpoint U of	Meteorological Tower	Continuous		Active	100%
I Extension Office	BAM 1020 PM2.5	Continuous		Active	99.8%
Sandpoint U of I Extension Office Lakes	BAM 1020 PM10	Continuous		Active	95.8%
Management Plan 3 Meter G C	Meteorological Tower	Continuous		Active	62.4%
Met	Meteorological Tower	Continuous		Active	99.8%
Porthill International Border Site Mt. Hall School	MET One E-Sampler Wind speed & direction MET One E-Sampler Wind speed & direction	Continuous	CRB Seasonal	Inactive Inactive	NA NA
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During February 12 of 14 active samplers achieved 75% or greater data completeness.

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#### **AIR QUALTY INDEX**

The air quality index is a tool used to convey information to the public regarding local levels of air pollution and the associated health concerns. These levels are depicted in the table below.

## Air Quality Index (AQI): Particle Pollution

Index Values	Levels of Health Concern	Cautionary Statements
0-50	Good	None
51-100	Moderate	Unusually sensitive people should consider reducing prolonged or heavy exertion outdoors.
101- 150	Unhealthy for Sensitive Groups	People with heart or lung disease, older adults, and children should reduce prolonged or heavy exertion outdoors.
151- 200	Unhealthy	People with heart or lung disease, older adults, and children should avoid prolonged or heavy exertion outdoors. Everyone else should reduce prolonged or heavy exertion.
201- 300	Very Unhealthy	People with heart or lung disease, older adults, and children should avoid all physical activity outdoors. Everyone else should avoid prolonged or heavy exertion.
301- 500	Hazardous	People with heart or lung disease, older adults, and children should remain indoors and keep activity levels low. Everyone else should avoid all physical activity outdoors.

Below is a table showing the total Air Quality Index (AQI) values for each of the reporting cities located in North Idaho for this reporting month. Differences in totals were due to sampler down time.

## February 2020

Coeur d'Alene	Pinehurst	Sandpoint	St. Maries
Green = 29	Green = 23	Green = 28	Green = 18
Yellow = 0	Yellow = 6	Yellow = 1	Yellow = 11
Orange = 0	Orange = 0	Orange = 0	Orange =0
Red = 0	Red = 0	Red = 0	Red = 0
Purple = 0	Purple = 0	Purple = 0	Purple = 0
Maroon = 0	Maroon = 0	Maroon = 0	Maroon = 0

#### 2020 YEAR TO DATE AQI TOTALS

Coeur d'Alene	Pinehurst	Sandpoint	St. Maries
Green =60(100%)	Green =50(83%)	Green =59(98%)	Green = 48 (80%)
Yellow =0	Yellow = 10(17%)	Yellow =1(2%)	Yellow = 12 (20%)
Orange = 0	Orange = 0	Orange = 0	Orange = 0
Red = 0	Red =0	Red =0	Red = 0
Purple = 0	Purple = 0	Purple = 0	Purple =0
Maroon =0	Maroon = 0	Maroon = 0	Maroon = 0

For further information about air quality in Idaho and the northwest region visit the following sites on the Internet or contact Ralph Paul, Coeur d'Alene Region Airshed Coordinator, at 208-769-1422.

http://www.deq.idaho.gov/

http://www.deq.idaho.gov/daily-air-quality-reports-forecasts

www.airnow.gov/index.cfm?action=airnow.fcsummarv&stateid=16